



16528

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/642,218	
	Filing Date	August 18, 2000	
	First Named Inventor	Yurieva et al.	
	Group Art Unit	1652	
	Examiner Name	R. Hutson	
Total Number of Pages in This Submission	6	Attorney Docket Number	22221/1050 (RU 315)

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ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Response to Restriction Requirement <input checked="" type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> A copy of the Notice to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Declaration and Power of Attorney <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Application Data Sheet <input type="checkbox"/> Request for Corrected Filing Receipt with Enclosures <input checked="" type="checkbox"/> A self-addressed, prepaid postcard for acknowledging receipt <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks	<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 14-1138 for the above identified docket number.	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Edwin V. Merkel Nixon Peabody LLP Clinton Square, P.O. Box 31051 Rochester, New York 14603-1051 Telephone: (585) 263-1128 Fax: (585) 263-1600
Signature	
Date	July 24, 2003

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]	
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July 24, 2003 Date	 Signature Wendy L. Barry Typed or printed name

FEE TRANSMITTAL FOR FY 2003

Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 985)

Application Number	09/642,218	RECEIVED JUL 31 2003 TECH CENTER 1600/2900
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First Named Inventor	Yurieva et al.	
Examiner Name	R. Hutson	
Art Unit	1652	
Attorney Docket No.	22221/1050 (RU 339)	

METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

Deposit Account Number 14-1138

Deposit Account Name Nixon Peabody LLP

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$ 0)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
	-20** =	X	0
Independent Claims	-3** =	X	0
Multiple Dependent	X		0

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1051	130	2051	65	Surcharge - late filing fee or oath
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet
1053	130	1053	130	Non-English specification
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action
1251	110	2251	55	Extension for reply within first month
1252	410	2252	205	Extension for reply within second month
1253	930	2253	465	Extension for reply within third month
1254	1,450	2254	725	Extension for reply within fourth month
1255	1,970	2255	985	Extension for reply within fifth month
1401	320	2401	160	Notice of Appeal
1402	320	2402	160	Filing a brief in support of an appeal
1403	280	2403	140	Request for oral hearing
1451	1,510	1451	1,510	Petition to institute a public use proceeding
1452	110	2452	55	Petition to revive - unavoidable
1453	1,300	2453	650	Petition to revive - unintentional
1501	1,300	2501	650	Utility issue fee (or reissue)
1502	470	2502	235	Design issue fee
1503	630	2503	315	Plant issue fee
1460	130	1460	130	Petitions to the Commissioner
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)
1806	180	1806	180	Submission of Information Disclosure Stmt
8021	40	8021	40	Recording each patent assignment per property (times number of properties)
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))
1801	750	2801	375	Request for Continued Examination (RCE)
1802	900	1802	900	Request for expedited examination of a design application

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 985)

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

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July 24, 2003

Date

Signature

Wendy L. Barry

Typed or printed name

SUBMITTED BY

Name (Print/Type)	Edwin V. Merkel	Registration No.	40,087	Telephone	(585) 263-1128
Signature	<i>Edwin V. Merkel</i>	(Attorney/Agent)		Date	July 24, 2003

SEND TO: Commissioner for Patents
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#8
JP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Yurieva et al.

Serial No. : 09/642,218

Cnfrm. No. : 6461

Filed : August 18, 2000

For : ENZYME DERIVED FROM
THERMOPHILIC ORGANISMS THAT
FUNCTIONS AS A CHROMOSOMAL
REPLICASE, PREPARATION AND USE
THEREOF

)
) Examiner:
) R. Hutson

) Art Unit:
) 1652

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RESPONSE TO RESTRICTION REQUIREMENT

MAIL STOP: _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the January 24, 2003, written restriction requirement, applicants hereby elect Group II (i.e. claims 7-10, 11-15, 22-26, 27-37, 38-42, 52-60, 61-63, 44-51, 64, and 68-72) and Group B (i.e., the *dnaX* nucleic acid of SEQ ID NO: 3) with traverse.

Applicants traverse the restriction requirement on several grounds.

Firstly, with respect to the restriction as between groups I, II, and III, applicants submit that these groups of invention are sufficiently related and, as noted in the outstanding office action, similarly classified such that they can be searched without undue burden upon the U.S. Patent and Trademark Office ("PTO"). Therefore, applicants respectfully request that the restriction requirement among Groups I-III should be withdrawn.

Secondly, applicants submit that restriction among Groups A-E is improper. The PTO merely takes the position that inventions A-E are "chemically and structurally unrelated" (office action at page 4). However, the PTO's position ignores that the claimed species of Groups A-E are related inventions. The species are capable of use together for purposes of forming a type III polymerase enzyme, i.e., the nucleic acids of Groups A-E encode different subunits that are capable of use together. As species capable of use together, the subject matter of Groups A-E are properly considered subcombinations. The Markush type claim 11 is appropriately considered as encompassing both various combinations and

various subcombinations, because claim 11 recites an "isolated nucleic acid molecule encoding at least a single subunit of a DNA polymerase III-type enzyme..." (emphasis added).

Because claim 11 encompasses both subcombinations A, B, C, D, and E as well as combinations thereof, restriction among Groups A-E must comply with Manual of Patent Examining Procedure § 806.05(a). In particular, even assuming that two-way distinctness can be demonstrated, restriction is inappropriate unless "reasons for insisting upon restriction are necessary, i.e., separate classification, status, or field of search." Id. In this case, the PTO has failed to assert that separate classification exists (see office action at page 1, which indicates that both protein subunits and nucleic acids are classified in the same class/subclass), that separate status exists, or a separate field of search is required. In the outstanding office action, the PTO merely asserts that the individual species would require different searches (see office action at page 4). The mere fact that different computer-assisted database queries would be needed for the different nucleic acid sequence (i.e., SEQ ID NO: 3, SEQ ID NO: 94, SEQ ID NO: 86, and SEQ ID NO: 106) fails to demonstrate that the species have a separate status or separate field of search. The PTO has already indicated that class 435/194 would be searched for all members of Group II, and there is no showing of other criteria having been satisfied. Thus, the PTO has failed to carry its burden in establishing that these related inventions require restriction.

Finally, from a practical perspective, applicants respectfully request that, at a minimum, the PTO consider examining the nucleic acids of *dnaX* (encoding tau and gamma subunits) and *dnaE* (encoding alpha subunit). As discussed between Examiner Hutson and the undersigned attorney during phone interviews on July 21 and July 22, 2003, the subject matter listed immediately above would appear to be potentially interfering subject matter relative to the subject matter claimed in U.S. Patent No. 6,238,905 to McHenry et al. ("McHenry"). No such restriction appears to have been made during prosecution of the McHenry patent. Therefore, to minimize the workload on the PTO and simplify the declaration of any potential interference, it would be prudent for the PTO to allow a reasonable number of nucleic acid molecules to be considered in the present application and, preferably, to allow a reasonable number of protein sequences to be considered in either the same application (as with McHenry) or in a single divisional application (the next best alternative).

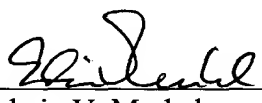
This is entirely consistent with the *sua sponte* directive of the Commissioner to partially waive the requirements of 37 C.F.R. § 1.141 *et seq.* to aid the biotechnology

industry in protecting its intellectual property without creating an undue burden on the PTO. See Examination of Patent Applications Containing Nucleotide Sequences, 1192 O.G. 68 (November 19, 1996). In particular, this announcement indicates that the PTO will search a reasonable number of sequences claimed in a single application, with an upper limit of ten nucleotide sequences being deemed reasonable. Therefore, restriction of inventions solely on the basis of different nucleic acid sequences is contrary to PTO policy.

In view of all of the foregoing, applicants respectfully submit that the restriction requirement should be withdrawn at least in part.

Respectfully submitted,

Date: July 24, 2003


Edwin V. Merkel
Registration No. 40,087

Nixon Peabody LLP
Clinton Square, P.O. Box 31051
Rochester, New York 14603
Telephone: (585) 263-1128
Facsimile: (585) 263-1600

